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[54]		LYTIC TREATMENT OF LE PROTEIN
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[51] [52]	U.S. Cl	
[58]	Field of Sea	260/112 R, 123.5; 204/131, 160.1
[56]		References Cited
	U.S. I	PATENT DOCUMENTS
		980 Oughton 260/123.5 X 1983 Komeyasu et al 426/244

## OTHER PUBLICATIONS

Bioelectrochemistry and Bioenergetics, vol. 3, pp. 328-337 (1976), Scheller et al.

J. of Biol. Chem. 239, No. 12 (1964), 4163-4170, Markus.

Analytical Biochemistry, 76 (1976), 170-176, Weitz-

Biochemical Journal, 93, No. 1 (1964), 1-11, Cecil et al. Biochemistry, 4, No. 1, (1965), 23-27, Leach et al.

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## 57] ABSTRACT

A process for the treatment of a vegetable protein is disclosed wherein the disulfide bonds of the protein are electrolytically reduced to provide a protein of improved functionality. Electrolytic reduction also results in unexpected removal of many of the naturally occurring pigments contained in a vegetable protein, such as soy protein, to provide a protein of improved whiteness.

32 Claims, 2 Drawing Figures